

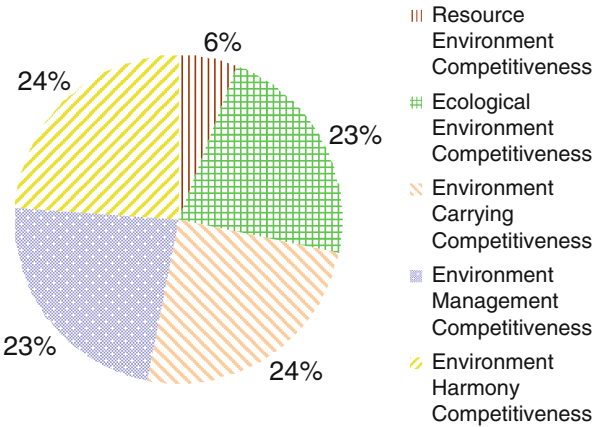
# Chapter 113

## Report on Global Environment

### Competitiveness of Poland

Poland is a country in Central Europe, bordered by the Baltic Sea to the north and Germany to the west, by the Czech Republic and Slovakia to the south, by Ukraine and Belarus to the east, by Lithuania and Russia to the northeast. It covers 304.2 thousand of square kilometers and has a population of 38.53 million. Its GDP reaches \$514.50 billion in 2011. Through the index system and evaluation model, the environment competitiveness index of Poland ranks at 38 in 133 countries.

Score:
52.78
Rank:
38



**Fig. 113.1** Contribution of sub-index to GEC

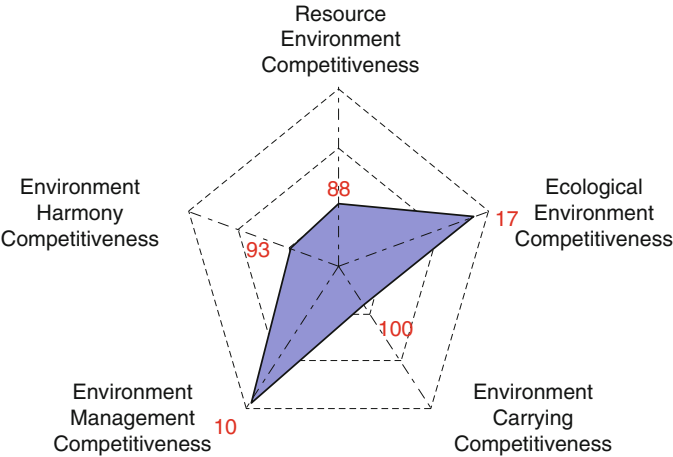


Fig. 113.2 Rank of sub-index of GEC

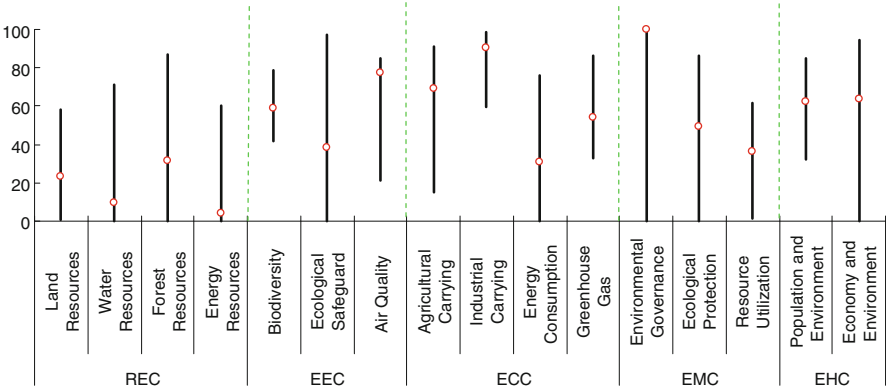


Fig. 113.3 Score and rank of the pillars of GEC

Table 113.1 Score and rank of all indicators of GEC

Indicators	Score	Rank	Indicators	Score	Rank
1 Resource Environment Competitiveness	15.06	88	Groundwater	5.88	82
1.1 Land Resources	23.17	23	Total internal renewable water resources	8.89	83
Land area per capita	1.40	100	1.3 Forest Resources	31.80	57
Percentage of arable land to total land area	61.89	13	Growing stock in forest and other wooded land	56.21	29
Arable land per capita	13.48	35	Proportion of land area covered by forest	36.06	60
1.2 Water Resources	9.46	95	Forest area per capita	1.69	69
Surface water	2.17	89	1.4 Energy Resources	4.10	80
Annual precipitation	20.91	90			

(continued)

**Table 113.1** (continued)

Indicators	Score	Rank	Indicators	Score	Rank
Fossil energy	2.05	26	Annual freshwater withdrawals for industry per value added of industry	93.88	96
Energy production	1.78	40	3.3 Energy Consumption	30.66	115
Proportion of combustible renewable and waste to total energy consumption	8.02	66	Energy consumption per unit of land area	99.29	105
Net energy imports of the energy consumption	8.37	72	Ratio of clean energy consumption	0.57	104
<b>2 Ecological Environment Competitiveness</b>	<b>60.07</b>	<b>17</b>	Elasticity of energy consumption	13.15	104
2.1 Biodiversity	58.90	36	Elasticity of electric power consumption	9.62	100
Threatened fish species	96.70	20	3.4 Greenhouse Gas	54.00	118
Threatened mammal species	97.28	22	Growth rate of CO <sub>2</sub> emissions	46.13	85
Threatened plant species	99.53	56	Growth rate of Methane emissions	61.03	47
GEF benefits index for biodiversity	0.50	99	CO <sub>2</sub> emissions per unit of land area	98.88	114
2.2 Ecological Safeguard	38.48	25	CO <sub>2</sub> emissions per unit of energy consumption	17.81	119
Terrestrial protected areas	60.60	21	<b>4 Environment Management Competitiveness</b>	<b>60.75</b>	<b>10</b>
Marine protected areas	5.31	39	4.1 Environmental Governance	100.00	1
2.3 Air Quality	77.13	37	Agricultural chemicals regulation	100.00	1
Inhalable particles (PM10)	75.91	75	Percentage of the rural population with access to an improved water source	N/A	N/A
Particulate matter (PM2.5)	84.86	66	Percentage of the urban population with access to an improved water source	100.00	1
Index of indoor air pollution	100.00	1	4.2 Ecological Protection	49.61	15
Nitrogen oxides emission	62.55	114	Area of plantation and afforestation	11.52	6
Sulfur dioxide emission	37.32	113	Biome protect	100.00	1
<b>3 Environment Carrying Competitiveness</b>	<b>64.88</b>	<b>100</b>	Overfishing of fishing resources	50.00	55
3.1 Agricultural Carrying	69.30	50	4.3 Resource Utilization	36.37	70
Cereal yield per unit of arable land	32.14	60	Utilization rate of water resources	0.78	43
Fertilizer consumption per unit of arable land	88.31	92			
Annual freshwater withdrawals for agriculture per unit of arable land	99.85	26			
3.2 Industrial Carrying	90.53	79			
Net exports of goods as a percentage of GDP	76.84	85			
Electric power consumption per unit of value added of industry	91.68	66			
SO <sub>2</sub> emissions per unit of value added of industry	99.72	79			

(continued)

**Table 113.1** (continued)

Indicators	Score	Rank	Indicators	Score	Rank
Percentage of total internal renewable water resources to total water resources	72.83	56	Renewable internal freshwater resources per capita	1.68	87
Percentage of agricultural land to total land area	62.63	45	SO <sub>2</sub> emissions per capita	86.33	105
Percentage of fossil fuel energy consumption to total energy consumption	9.24	100	CO <sub>2</sub> emissions per capita	78.44	104
5 Environment Harmony Competitiveness	63.13	93	Energy consumption per capita	80.13	85
5.1 Population and Environment	62.49	112	5.2 Economy and Environment	63.77	76
Percentage of population with access to Improved sanitation facilities	90.00	62	Land resource utilization efficiency	0.49	28
Motor vehicles per 1,000 people	37.53	108	Sulfur dioxide emissions per unit of GDP	91.62	82
			Carbon dioxide emissions per unit of GDP	76.52	98
			Energy consumption per unit of GDP	86.46	58

**Table 113.2** Rank distribution of the individual indicators of GEC

Sub-index	Number of the individual indicators	Rank 1–10	Rank 11–30	Rank 31–60	Rank 61–100	Rank 101–133
Resource Environment Competitiveness	14	0	4	3	7	0
Ecological Environment Competitiveness	11	1	4	3	2	1
Environment Carrying Competitiveness	15	0	0	3	6	6
Environment Management Competitiveness	10	4	1	3	1	0
Environment Harmony Competitiveness	10	0	1	0	5	4
Total	60	5	10	12	21	11

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